

WHAT IS CLAIMED IS:

1. A method of handling messages at an interface in a communication system, comprising the steps of:

- 5 a) receiving a message having an information element indicating the message's type;
b) determining whether a frequency of receipt of messages of a predetermined type exceeds a threshold;
c) handling the message in a normal way if the frequency does not exceed the threshold; and
d) discarding the message if the frequency exceeds the threshold and the message is of the predetermined type.

10 2. The method of claim 1, wherein the method is carried out by a serving general packet radio service support node (SGSN) after the SGSN is re-started.

15 3. The method of claim 2, wherein the information element is a local temporary logical link identity, and whereby messages of another type are handled in the normal way even when the frequency exceeds the threshold.

20 4. The method of claim 1, wherein the method is carried out by a base station system (BSS) after the BSS is re-started.

25 5. The method of claim 1, further comprising the step of determining whether a frequency of receipt of messages of a plurality of types exceeds a second threshold, wherein if the frequency exceeds the second threshold, steps b), c), and d) are carried out, and if the frequency does not exceed the second threshold, handling the message in the normal way.

30 6. A method of handling messages at an interface in a communication system, comprising the steps of:

- a) receiving an uplink message and reading an information element in a header of the received message;

- b) accessing a table based on the read information element to determine a status of the read information element as either already known or unknown;
- c) based on the table access, handling the message in a normal way if the information element is known, and otherwise carrying out the following steps:
- 5 d) updating a frequency of receipt of unknown read information elements;
- e) comparing the updated frequency to a threshold;
- f) if the updated frequency is less than the threshold, handling the message in the normal way, and otherwise carrying out the following steps:
- g) determining whether the read information element is of a predetermined type;
- 10 h) if the read information element is not of the predetermined type, handling the message in the normal way, and
- i) if the read information element is of the predetermined type, discarding the message.

15 7. The method of claim 6, wherein the method is carried out in a serving general packet radio service support node (SGSN) after the SGSN is re-started and the information element is a temporary logical link identity.

20 8. The method of claim 6, wherein the method is carried out in a base station system (BSS) after the BSS is re-started and the information element is a temporary logical link identity.

25 9. The method of claim 6, wherein the threshold is based on processing resources available in the SGSN for handling messages.

30 10. The method of claim 9, wherein the processing resources comprise at least one of an amount of free memory left to the SGSN and a load on a central processing unit of the SGSN.

35 11. The method of claim 6, further comprising the steps of determining whether the message includes a second information element that is encrypted, the determining step being carried out if the updated frequency does not exceed the threshold and

before handling the message in the normal way, and if the second information element is not encrypted, handling the message in the normal way, but if the second information element is encrypted, discarding the message.

5 12. The method of claim 6, wherein if the information element is not of the predetermined type, a frequency of receipt of messages having information elements of another type is compared to a second threshold, and if the second threshold is not exceeded, the message is handled in the normal way, but if the second threshold is exceeded, the message is discarded.

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13. The method of claim 12, further comprising the steps of determining whether the message includes a second information element that is encrypted, the determining step being carried out if the frequency does not exceed the second threshold and before handling the message in the normal way, and if the second information element is not encrypted, handling the message in the normal way, but if the second information element is encrypted, discarding the message.

14. The method of claim 6, further comprising the step of determining whether a frequency of receipt of messages of a plurality of types exceeds a second threshold, wherein if the frequency exceeds the second threshold, steps d) - i) are carried out, and if the frequency does not exceed the second threshold, handling the message in a normal way.